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# Epidemiologic assessment of self-concept and academic self-efficacy in Iranian high school students: Multilevel analysis

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## Abstract:

**INTRODUCTION:** In social cognitive theory, self-efficacy and self-concept (SC) have been introduced as important constructs that associate with adolescents' achievements. The aim of this study was to investigate the determinant factors of academic self-efficacy (ASE) and SC in Iranian high school students based on the multilevel analysis.

**MATERIALS AND METHODS:** In this descriptive-analytical cross-sectional study, 1740 students from 53 high schools selected with stratified random sampling method in 2018 in Qazvin, Iran. Data collection tools were the Morgan and Jinks Self-Efficacy Scale and the Piers-Harris Children's SC Scale-Second Edition. The association between some of the students and school variables with ASE and SC was analyzed by hierarchical linear regression models.

**RESULTS:** The score of the students' standardized ASE was lower than SC. ASE and SC had a strong positive significant association with economic status, grade point average, and the educational period of high school. Sex had no association with any of them. Physical activity had a positive significant association with SC but was no found association by ASE.

**CONCLUSION:** These findings revealed that for improving the adolescents' ASE and SC should be attention to the adolescents' family condition and school-related factors. Proper educational, sports, and supportive programs can be effective on the adolescents' self-efficacy and SC.

## Keywords:

Academic self-efficacy, adolescents, Iran, school, self-concept, students

## Introduction

According to Bandura, self-efficacy is a key component in social cognitive theory that was recognized as important research issue.<sup>[1,2]</sup> People with high self-efficacy have a strong belief about their achievements in specific situations. Self-efficacy shows the performance capability of people and is an important source for the quality of life.<sup>[1,3-5]</sup> This construct has defined in different types. One of them is academic self-efficacy (ASE). ASE introduces students' beliefs about

their attainment to specific academic goals or educational achievements. It affects students' educational motivation, resistance, and success.<sup>[6]</sup>

Another construct that has an important role in students' life is self-concept (SC). SC was defined the whole of the attitude, emotions, and knowledge of people about their ability and skills that can affect their life. SC has five scales: social, educational, psychological, physical, and familial.<sup>[7,8]</sup> Many studies have been shown an association between ASE and SC with academic achievement that

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